- 7. The need to emphasize training in vaccine research and to improve peer review. The panel noted that research training was not specifically addressed in the NIAID plan. The panel considered this to be an essential component of any successful research plan and urged in the strongest possible terms that training be specifically identified as an initiative under the plan. The effective development of vaccines requires skills and expertise usually not available in traditional training situations. The feasibility of expanding the training portfolio to incorporate training in vaccinology will be a challenge because the total number of trainee slots (FTTPS) at the pre- and postdoctoral levels is restricted. Despite this obstacle, the panel strongly believes that training opportunities in vaccinology should be expanded and urged NIAID to explore all options for such an expansion. Concern also was expressed about issues related to the peer review of applications because in many established study sections vaccine research is not considered to be within the purview of the review groups or not "cutting-edge" science. The panel urged NIAID to take appropriate steps to reduce the impact of this bias toward the vaccine research efforts outlined in the plan.
- 8. The need-for the Institute to foster interactions with biotechnology firms and the vaccine industry. NIAID has a long history of productive and useful interactions with industry on vaccine development. These interactions will expand in the future as discoveries in basic science are applied more aggressively to vaccine problems. NIAID proposes to enhance and facilitate this process by expanding its ability to move basic research findings into clinical investigation. This will require significant expansion of the capacity of NIAID to produce experimental lots of candidate vaccines for Phase I or 11 clinical trials. The proposed expansion of this effort is an integral element of the plan. The panel agreed that this was a need and strongly endorsed the Institute's proposal to expand its capability in this area. In commenting that additional efforts should be undertaken to inform interested parties about vaccine research developments, the panel identified the Institute's Jordan Report as an effective vehicle for such communication.
- 9. Multidisciplinary Vaccine Research Centers. The feasibility of developing or strengthening multidisciplinary centers for vaccine evaluation in endemic areas was discussed at length. Concerns included the historical problems of sites supported by the Tropical Disease Research (TDR) program of the World Health Organization. It was noted, however, that the efforts of the TDR have not received the support necessary to ensure long-term success. The panel was cautioned not to use this experience as the only frame of reference. Other efforts,